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Disabilitiesof Pregnancy: A Case Report At Shimla, Himachal Pradesh

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Abstract- Pregnancy is also regarded as a very positive moment in the life of a woman. This, despite the fact that many ongoing improvements are also marked by this era. Feelings of anxiety during pregnancy are relatively normal, with some level of anxiety or anxiety encountered by around 10-15 percent of all pregnant women during this significant transitional period of one's life. Research shows that in the perinatal era, anxiety disorders are more common than depressive disorders. Pregnancy-specific anxiety is characterized as the mental state of a pregnant woman whose worries, such as fears about the child's pregnancy, delivery, and health, are specific to the pregnancy itself. The capacity of a woman to adapt to the changes and difficulties of pregnancy is unique; thus, P-SA can differ from woman to woman. This article elaborates to assess the Psychiatric disorders associated with pregnancy in Himachal Pradesh.

Keywords: Pregnancy, Perinatal Era, Anxiety Disorders, Depressive Disorders, Woman

1) Introduction

Pregnancy-specific anxiety is characterized as worries, concerns and concerns regarding pregnancy, childbirth, and infant health and future parenting stated that nulliparous fears of women's childbirth were connected to labor pain, complications and procedures related to birth.

Previous studies on pregnancy anxiety concluded that the real predictors of adverse labor outcomes are pregnancy-specific anxieties rather than general anxiety. These researchers suggested that pregnancy-specific anxiety estimation be more precisely useful in detecting and mitigating risk. The structure of pregnancy anxiety and its effect on pregnancy outcomes need

further research investigating pregnancy-specific anxieties and their risk factors, with insufficient data available on particular issues and concerns related to pregnancy.

In different hospitals in Kerala, India, formal childbirth education courses are not widely available and even the steps to examine anxiety during pregnancy are buried under heavy patient loads. Previous studies of nulliparous pregnant women reported a high prevalence (90-94 percent) of childbirth anxiety and poor awareness of childbirth planning among nulliparous pregnant women in Kerala. Due to the non-availability of formal childbirth education courses, proper treatment of pregnancy anxiety is difficult. Because of urbanization and the movement towards the nuclear family system, the conventional way of transmitting information about pregnancy and child rearing from mothers to daughters is disappearing. The pregnancy-specific anxiety in the current environment has not been well explored to the best of our knowledge.

The importance of pregnancy-specific anxiety estimation and its related factors for systematic research on pregnancy-specific anxiety against specific risk mitigation requirements. The goal of this study was to evaluate the levels of anxiety unique to pregnancy and its associated risk factors, which in turn will help to establish and incorporate suitable strategies to minimize adverse pregnancy outcomes. The aim of the research was to determine the prevalence during the three trimesters of pregnancy of pregnancy-specific anxiety and to identify the related risk factors.

2) Psychiatric Disorders During Pregnancy Treatment

Although pregnancy has typically been considered a time of emotional well-being, recent studies suggest thatup to 20% of women suffer from mood or anxiety disorders during pregnancy. Particularly vulnerable are those women with histories of psychiatric illness who discontinue psychotropic medications during pregnancy.In a recent studywhich prospectively followed a group of women with histories of major depression across pregnancy, of the 82 women who maintained antidepressant treatment throughout pregnancy, 21 (26%) relapsed compared with 44 (68%) of the 65 women who discontinued medication. This study estimated that women who

discontinued medication were 5 times as likely to relapse as compared to women who maintained treatment.

High rates of relapse have also been observed in women with bipolar disorder. One study indicated that during the course of pregnancy, 70.8% of the women experienced at least one mood episode. The risk of recurrence was significantly higher in women who discontinued treatment with mood stabilizers (85.5%) than those who maintained treatment (37.0%).

Although data accumulated over the last 30 years suggest that some medications may be used safely during pregnancy, knowledge regarding the risks of prenatal exposure to psychotropic medications is incomplete. Thus, it is relatively common for patients to discontinue or to avoid pharmacologic treatment during pregnancy.

3) Pregnancy Labeling and Lactation Rule

Food and Drug Administration (FDA) provided guidelines to drug companies for labeling medications with regard to their safety during pregnancy. This system of classification used five risk categories (A, B, C, D and X) based on data derived from human and animal studies. While widely used to make decisions regarding the use of medications during pregnancy,many criticized this system of classification, indicating that this type of drug labeling was often not helpful and, even worse, may be misleading.

In an effort to improve the accuracy and usefulness of information regarding the safety of medications used during pregnancy and breastfeeding, the FDA proposed a newly designed system on June 30th 2015. ThePregnancy and Lactation Labeling Ruleor PLLR will abolish the letter categories and instead will include more comprehensive information discussing the potential risks and benefits to the mother and the fetus, and how these risks may change during the course of pregnancy.

Companies will be required to remove the pregnancy letter categories from the labeling for all prescription drugs and will have to revise the labeling with updated information. Medications approved before June 30, 2001 are not covered by the PLLR.

4) Weighing the Risk

Women with histories of psychiatric illness frequently come in for consultations regarding the use of psychotropic medications during pregnancy. Not infrequently, women present with the first onset of psychiatric illness while pregnant. Many pregnancies are unplanned and may occur unexpectedly while women are receiving treatment with medications for psychiatric disorders. Many women may consider stopping medication abruptly after learning they are pregnant, but for many women this may carry substantial risks.

Decisions regarding the initiation or maintenance of treatment during pregnancy must reflect an understanding of the risks associated with fetal exposure to a particular medication but must also take into consideration the risks associated with untreated psychiatric illness in the

mother. Psychiatric illness in the mother is not a benign event and may cause significant morbidity for both the mother and her child; thus, discontinuing or withholding medication during pregnancy is not always the safest option.

Depression and anxiety during pregnancy have been associated with a variety of adverse pregnancy outcomes. Women who suffer from psychiatric illness during pregnancy are less likely to receive adequate prenatal care and are more likely to use alcohol, tobacco, and other substances known to adversely affect pregnancy outcomes. Several studies have described low birth weight and fetal growth retardation in children born to depressed mothers. Preterm delivery is another potential pregnancy complication among women experiencing distress during pregnancy. Pregnancy complications related to maternal depression and anxiety in late pregnancy have also been described, including an increased risk for having pre-eclapsia, operative delivery, and infant admission to a special care nursery for a variety of conditions

including respiratory distress, hypoglycemia, and prematurity. These data underscore the need to perform a thorough risk/benefit analysis of pregnant women with psychiatric illness, including evaluating the impact of untreated illness on the baby and the mother, as well as the risks of using medication during pregnancy.

5) DIAGNOSTIC CONSIDERATIONS IN THE PREGNANT WOMAN

5. 1 Neuroimaging

For most clinicians, neuroimaging in pregnant women remains a field of debate and some concern. However, despite concerns about the potential for long-term consequences if the fetus is exposed to radiation or a strong magnetic field, neuroimaging in one form or another is both safe and feasible in most situations. As there is no radiation involved, MRI is also the recommended imaging study for a pregnant woman. However, since they cross the placenta with an uncertain rate of clearance from the amniotic fluid, paramagnetic contrast agents must be avoided.

There is no understanding of the impact of gadolinium-based agents on the embryo, although limited evidence in animal models suggest possible teratogenicity. However, it is important to

balance the potential risk of imaging modalities with the potential gain obtained by promoting rapid diagnosis. Depending on the series of sequences collected, brain parenchyma MRI studies can be very effective in detecting both ischemic changes and hemorrhage. In addition, MRI time can be reduced without substantially sacrificing the usefulness of the analysis by using an oriented sequence panel addressing a particular clinical problem such as a restricted stroke series (T2, FLAIR, DWI, and GRE). To test the cerebral vasculature, time-of-flight MR angiography, which does not require contrast administration, may be used.

During an imaging analysis involving radiation, precautions must be taken to protect the fetus as much as possible from radiation exposure. The American College of Radiology recommendations, however, note that the radiation exposure is characteristically very low for diagnostic radiological procedures outside the abdomen/pelvis, as the fetus is only exposed to

scattered radiation. A commonly available plain-head CT scan exposes the fetus to approximately 0.5cGy of radiation, which is around 1% of the agreed cumulative fetal exposure threshold. With respect to other widely used diagnostic imaging modalities, where these tools are used to examine the brain, there is essentially no formalized fetal safety data. There are, however, several reviews looking at thorax and abdomen CT, CT angiography, and MRI that do not show major patterns in terms of fetal malformations or cognitive deficits. Care should be taken in every imaging scenario to clarify the risks and benefits with the patient and to review the clinical image with a radiologist who may be able to record the analysis to reduce fetal exposure.

Increasingly used in stroke assessment, CT angiography and perfusion studies require higher doses of radiation as well as the use of iodinated contrast and should be avoided unless considered essential to the evaluation of the mother.

Conventional cerebral angiography in the same vein requires both radiation exposure and contrast administration, but can be used as both a diagnostic and therapeutic intervention in some cases (eg aneurismal rupture, proximal cerebral embolism). When used during pregnancy, iodized contrast is considered relatively secure, although there is a slight concern linked to the induction of neonatal hypothyroidism. Keeping the mother well hydrated and reducing the contrast dosage, where practicable, are standard techniques when iodinated contrast usage cannot be avoided.

6) The Nervous System In Pregnancy

From fertility to lactation, nervous system diseases may affect any aspect of reproduction in women, and maternal neurological disease and its treatment may have an effect on the offspring of that pregnancy. In addition, pregnancy may also affect neurological disorders and, because of concern for the fetus, the investigation and treatment of such conditions will need to be changed. As well as the complicated clinical issues involved in the treatment of common neurological

disorders such as epilepsy, the widespread and largely inaccessible literature makes it difficult to treat the rarer problems.

- **DIAGNOSTIC PROCEDURES**

In general, a thorough history and physical evaluation by an experienced neurologist is the most helpful neurologic diagnostic technique. This usually results in a shortlist of diagnostic possibilities and, if possible, restricts the questions to be answered by further research. It is possible to conduct electroencephalography (EEG) and electromyography (EMG) without risk. The signs for lumbar puncture are not affected by pregnancy. Pregnancy is not an absolute contraindication to any treatment involving neuroradiology. A compromise must, however, be made between the details that can be gained from the test and the possibility of radiation exposure to the fetus. The risk of miscarriage or congenital abnormality will increase during the first trimester of high dose radiation exposure, while later exposure to pregnancy is associated with a very small increase in childhood cancer risk.

However, the doses used are minimal for most types of investigation and well below the thresholds that are specifically associated with fetal complications. The radiation dose to the uterus from the skull or cervical spine film, for example, is smaller than 0.001 cGy (1 mrad), from the thoracic spine series to 0.1 cGy (0.1 rad) and from the lumbar spine series to 1.5 cGy (1.5 rad), while there is a lower than 1% chance of congenital radiation abnormality in the first trimester of 10 cGy with radiation exposure (10 rad).

However, uncertainty remains as to the effects of lower doses, especially in the early first trimester, so the lowest possible exposure should be used whenever possible. Unless they are necessary, especially during the first trimester, lumbar spine films and myelography should be avoided.

Including computed tomography (CT) scans, abdominal lead shields limit fetal radiation exposure to small levels during head and neck filming. During pregnancy, cerebral angiography

can be performed and transfemoral cerebral angiography has been recommended, while brief exposure to abdominal fluoroscopy during catheterization using a brachial artery may be prevented. The iodized contrast crosses the placenta, but does not seem to affect the fetus. CT scanning has supplanted brain scans of radionuclides, which can be removed during pregnancy. Powerful magnetic resonance imaging (MRI) magnetic fields tend to have no effect on the fetus, but MRI should be avoided in the first trimester, unless clinically indicated.

7) EPILEPSY

Maternal epilepsy complicates approximately 1 in 200 pregnancies, and epilepsy is the most common severe neurological disorder to be experienced by an obstetrician. Many of the complex associations have yet to be delineated between pregnancy, epilepsy, anticonvulsant metabolism, and effects on the fetus. There are several clinically relevant questions to be addressed.

The effect of pregnancy on the occurrence of epileptic seizures is variable. There is no difference in most pregnancies, as up to a quarter of women may experience a decrease in the number of seizures, and the frequency of seizures may rise in up to one third of women. It may be hard to predict which women during their pregnancy who have repeated seizures would have an increased number of seizures. Changes in occurrence in prior pregnancies tend to be unrelated to the type of seizure, the period of epilepsy, or the epilepsy pattern.

The risk of an elevated seizure frequency during pregnancy, however, tends to be related to the frequency of pre-pregnancy epileptic fits. Women with more than one pregnancy seizure a month should expect to get worse during pregnancy. A woman who has been seizure-free for a few years before pregnancy, on the other hand, is unlikely to convulse during pregnancy and may consider stopping antiepileptic medication prior to pregnancy in certain cases. The consequences of the enormous increases in sex steroids during pregnancy on epilepsy are impredictable. The seizure threshold for both focal and generalized seizures is lowered by elevated estrogen levels, whereas the converse is true for progesterone. During pregnancy, both hormones increase. The net impact is uncertain on the seizure threshold.

It is also found that epileptic women who have seizures during pregnancy have subtherapeutic levels of antiepileptic drugs. With increasing gestation, plasma concentrations of antiepileptics decline, likely linked to impaired intestinal malabsorption, decreased plasma protein binding, decreased albumin levels, weight gain, and increased drug clearance. However, while the levels of plasma drugs during the third trimester are considered to be the lowest, the rise in seizure incidence is most frequently seen during the first trimester. Pregnancy also decreases sodium and magnesium concentrations, and seizures may be predisposed to this alteration in the balance of cations. Stress and lack of sleep can be important. In late pregnancy, in women with therapeutic levels of anticonvulsants, insomnia can cause seizures.

8) Anticonvulsant Metabolism

Typically, during pregnancy, the dosage of anticonvulsants required to maintain a previously defined amount of therapeutic blood will increase, especially during the second half. Blood levels also occur at monthly intervals during pregnancy, or more often if seizures occur. Usually, dose schedules return to pregnancy levels within 6 weeks, often with drastic adjustments in the case of phenytoin within the first 2 weeks.

During pregnancy, the apparent clearance of anticonvulsants increases by a factor of about 1.5 for phenobarbital, around 2 for carbamazepine, and 2-4 for phenytoin. For each drug, the reasons vary. The increase in lamotrigine clearance tends to be higher than with other anticonvulsants and is associated with an increase in seizure frequency, such that the level-based modification of the lamotrigine dose is acceptable for this procedure. Although hepatic catabolism of other anticonvulsants is caused by phenobarbital, it is primarily excreted by the kidney. Alkaline urine facilitates phenobarbital renal clearance. The rise in carbamazepine hypoxide metabolites during pregnancy shows that the factor responsible for the medicationis hepatic metabolism. Intestinal malabsorption is the primary cause of phenytoin, and enhanced parahydroxylation is a secondary cause.

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